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(56) Documents Cited
GB 2051195 A GB 1414857 A GB 1397250 A
US 4796384 A US 4615142 A US 4006768 A

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(54) Security bars

(57) Security apparatus 10 for selectively preventing access through a window 12 comprises three spaced telescopic bars 14 interconnected at their free ends by a cross member 26. The bars 14 are arranged to be movable from within a wall adjacent the window 12 to extend thereacross. The bars can extend across to the opposite side of the window 12 or can be engageable with a corresponding arrangement extending from the opposite side of the window.

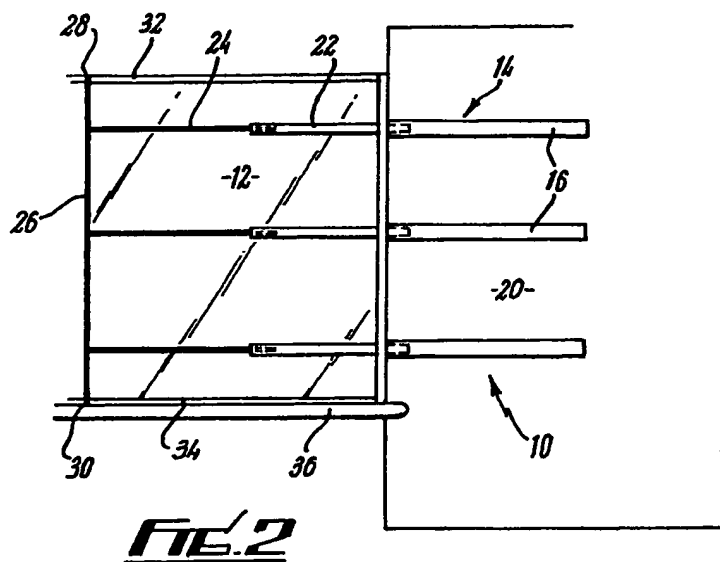


FIG. 2

GB 2 276 901 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

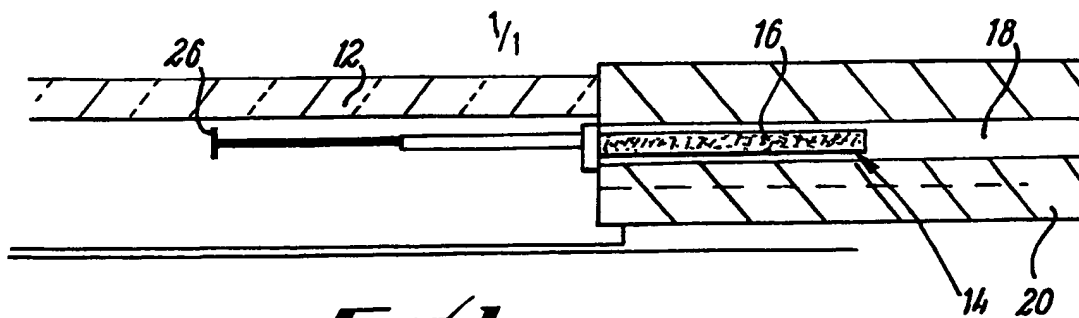


FIG. 1

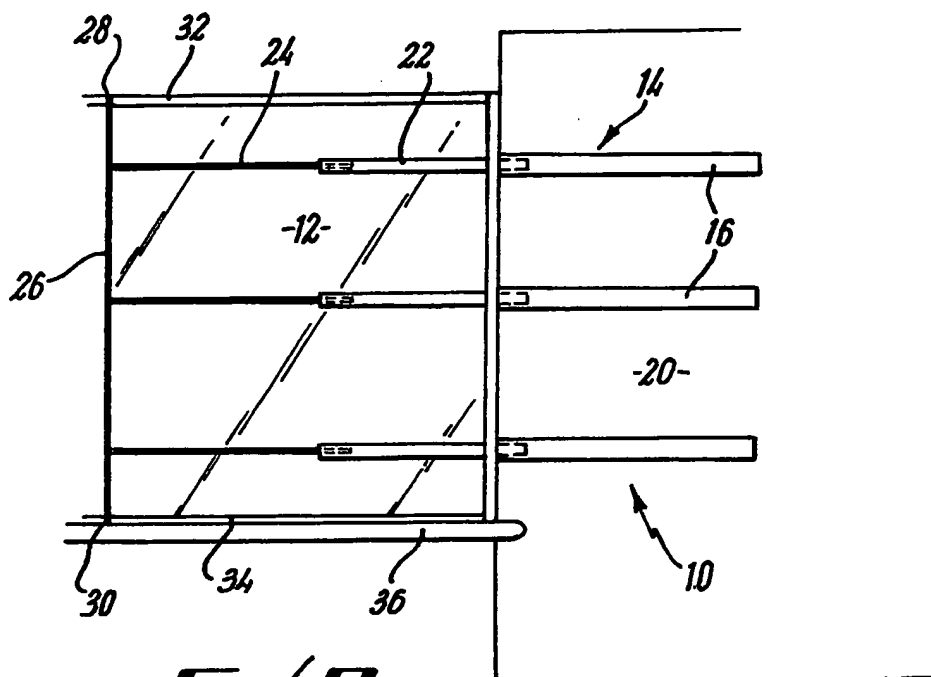


FIG. 2

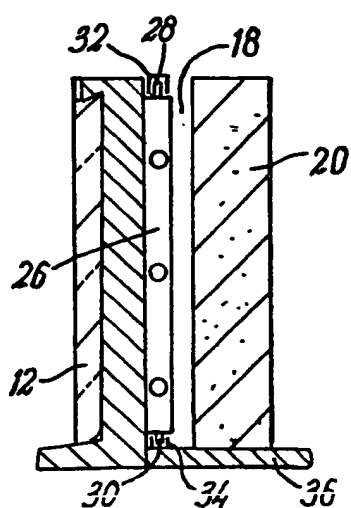


FIG. 3

Security Apparatus

This invention relates to security apparatus, and particularly but not exclusively security apparatus for selectively preventing access through an opening such as a window or door.

Burglary is an ever increasing problem in today's society. Security weak spots on buildings and particularly domestic buildings tend to be the doors and especially the windows. Windows being generally made of glass are inherently easy to break or can often be forced and thus enable easy entry to the building. Precautions such as window bars or shutters can be used but these are aesthetically unpleasing and can interfere with the main purpose of windows which is to let light and perhaps also air into a building.

According to the present invention there is provided security apparatus, the apparatus comprising a plurality of security members selectively movable between a first position extending across an opening of a building in a spaced relationship so as to prevent access therethrough but permit light and ventilation to pass therethrough, and a second position substantially clear of the opening to permit unrestricted access.

In the second position the security members are preferably locatable within a wall of the building adjacent the opening. The security members may be locatable in a cavity within the wall.

The security members preferably comprise a plurality of spaced substantially parallel elongate members. The elongate members may be telescopic. One or more cross members may be provided which interconnect the elongate members. The security members may be slidably movable between the first and second positions, and a track may be provided to assist the sliding movement. The track may be mountable along an edge of the opening and tracks may be provided along opposite edges of the opening.

The security members may be lockable in the first position. Locking means may be provided for this purpose and the locking means may be inaccessible from outside of the building.

The security members preferably extend substantially horizontally across the opening in the first position. Alternatively, the security members may extend substantially vertically across the opening in the first position.

Alarm means may be provided on the security members which indicate if the security members have been tampered with and/or cut. The alarm means may be located within the elongate members.

The apparatus may comprise security members locatable on opposite sides of the opening in the second position and connectable together in the first position.

The invention also provides security apparatus for a window according to any of the preceding seven paragraphs.

An embodiment of the present invention will now be described by way of example only with reference to the accompanying drawings, in which:-

Fig. 1 is a sectional view from above of security apparatus according to the present invention in use;

Fig. 2 is a side view of the apparatus of Fig. 1;
and

Fig. 3 is an end view of the apparatus of Fig. 1.

The drawings show security apparatus 10 for selectively preventing access through a window 12. The apparatus 10 is located on the interior side of the window 12 and comprises three spaced telescopic bars 14. The bars 14 comprise a host cylinder 16 locatable in the

cavity 18 of the wall 20 adjacent the window 12. The bars 14 comprise two members 22, 24 extendable from the cylinder 16. When retracted the members 22, 24 of the bars 14 locate substantially in the cylinder 16 within the wall 20. When extended the bars 14 extend across the window 12. A cross member 26 interconnects the free ends of the outermost member 24 and extends the full height of the window 12. Projections 28, 30 are provided respectively on the upper and lower ends of the cross member 26 and respectively slidably engage in corresponding tracks 32, 34 mounted on the underside of the top of the window surround and on the window ledge 36.

In use, when free access to the window 12 is required, the members 22, 24 are pushed into the cylinder 16 with the cross member 26 abutting the side of the window frame. When it is required to prevent access through the window 12, the cross member 26 is pulled across the window 12 pulling the members 22, 24 out of the cylinder 16.

A similar apparatus 10 will be provided on the opposite side of the window frame such that when the members 22, 24 extend fully from the cylinder 16 the cross member 26 will abut a corresponding cross member on the apparatus provided on the opposite side of the

window frame. The respective cross members may then be locked together by any suitable means such as a padlock. The locking means may be arranged such that access thereto is prevented from outside of the window 12. A locking part could be provided which locks together the respective cross members 26 and is lockable in position from a location inside the building and below window level.

If required, alarm means may be provided on the bars 14. Alarm means may provide an indication of whether the bars 14 have been tampered with and/or cut. The alarm means may comprise a wire inside the bars 14 or an electric circuit which is created in the bars 14 and is broken by a person contacting the bars 14 and/or the bars 14 being cut.

Whilst the described example comprises apparatus 10 movably horizontally from either side across a window. For small windows a single apparatus may be usable which can extend right across the window. In certain applications the bars may extend vertically rather than horizontally. It is to be realised that apparatus of this type can be used to protect doors or other openings as well as windows.

The apparatus described thus provides protection

for an opening such as a window or door which prevents unauthorised access yet enables light and ventilation to come through the opening. The apparatus is of relatively simple construction and can thus be inexpensively and robustly manufactured and also made to be aesthetically appealing. The apparatus can be readily installed, only requiring the fixing of the tracks and drilling into the wall to locate the telescopic bars. The apparatus is suitable for location in the cavities of cavity wall thus reducing the amount of drilling necessary. Once installed, there are no extra boxes of the like found with conventional shutters. Whilst the apparatus prevents unauthorised access, the apparatus can readily be opened to permit exit in an emergency.

Various other modifications may be made without departing from the scope of the invention. For example, the telescopic bars may comprise a different number of components. Other locking means may be provided for locking the apparatus across an opening. In certain instances it may be possible to manage without the tracks.

Whilst endeavouring in the foregoing Specification to draw attention to those features of the invention believed to be of particular importance it should be understood that the Applicant claims protection in

respect of any patentable feature or combination of features hereinbefore referred to and/or shown in the drawings whether or not particular emphasis has been placed thereon.

Claims:-

1. Security apparatus, the apparatus comprising a plurality of security members selectively movable between a first position extending across an opening of a building in a spaced relationship so as to prevent access therethrough but permit light and ventilation to pass therethrough, and a second position substantially clear of the opening to permit unrestricted access.
2. Apparatus according to Claim 1, in which in the second position the security members are locatable within a wall of the building adjacent the opening.
3. Apparatus according to Claim 2, in which the security members are locatable in a cavity within the wall.
4. Apparatus according to any of the preceding claims, in which the security members comprise a plurality of spaced substantially parallel elongate members.
5. Apparatus according to Claim 4, in which the elongate members are telescopic.

6. Apparatus according to Claims 4 or 5, in which one or more cross members are provided which interconnect the elongate members.

7. Apparatus according to any of the preceding claims, in which the security members are slidably movable between the first and second positions.

8. Apparatus according to Claim 7, in which a track is provided to assist the sliding movement of the security members.

9. Apparatus according to Claim 8, in which the track is mountable along an edge of the opening.

10. Apparatus according to Claim 9, in which tracks are provided along opposite edges of the opening.

11. Apparatus according to any of the preceding claims, in which the security members are lockable in the first position.

12. Apparatus according to Claim 11, in which locking means are provided.

13. Apparatus according to Claim 12, in which the locking means are inaccessible from outside of the

building.

14. Apparatus according to any of the preceding claims, in which the security members extend substantially horizontally across the opening in the first position.

15. Apparatus according to any of Claims 1 to 13, in which the security members extend substantially vertically across the opening in the first position.

16. Apparatus according to any of the preceding claims, in which alarm means are provided on the security members which indicate if the security members have been tampered with and/or cut.

17. Apparatus according to Claim 16 when dependent on at least Claim 4, in which the alarm means is located within the elongate members.

18. Apparatus according to any of the preceding claims, in which the apparatus comprises security members locatable on opposite sides of the opening in the second position and connectable together in the first position.

19. Security apparatus for a window according to any

of Claims 1 to 18.

20. Security apparatus substantially as hereinbefore described with reference to the accompanying drawings.

21. Any novel subject matter or combination including novel subject matter disclosed in the foregoing specification or claims and/or shown in the drawings, whether or not within the scope of or relating to the same invention as any of the preceding claims.

Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

Application number
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Relevant Technical Fields

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(ii) Int Cl (Ed.5) E06B 9/00, 9/01, 9/02, 9/04, 9/06

Search Examiner
MR J FULCHER

Date of completion of Search
15 JUNE 1994

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ONLINE DATABASE: WPI

Documents considered relevant following a search in respect of Claims :-
1 TO 20

Categories of documents

- | | |
|---|---|
| X: Document indicating lack of novelty or of inventive step. | P: Document published on or after the declared priority date but before the filing date of the present application. |
| Y: Document indicating lack of inventive step if combined with one or more other documents of the same category. | E: Patent document published on or after, but with priority date earlier than, the filing date of the present application. |
| A: Document indicating technological background and/or state of the art. | &: Member of the same patent family; corresponding document. |

Category	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2051195 A (BOND & KEATING)	1 AT LEAST
X	GB 1414857 (STEPHENS) see Figure 1	1 AT LEAST
X	GB 1397250 (PRICE)	1 AT LEAST
X	US 4796384 (WARWICK) see Figure 1	1 AT LEAST
X	US 4615142 (REEVES) see Figure 4	1 AT LEAST
X	US 4006768 (HORGAN) see Figures 1 to 5	1 AT LEAST

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).